

Title (en)

EXHAUST GAS PURIFICATION SYSTEM FOR A HYBRID VEHICLE

Title (de)

ABGASREINIGUNGSSYSTEM FÜR EIN HYBRIDFAHRZEUG

Title (fr)

SYSTÈME DE PURIFICATION DE GAZ D'ÉCHAPPEMENT POUR VÉHICULE HYBRIDE

Publication

**EP 3517748 A1 20190731 (EN)**

Application

**EP 19153484 A 20190124**

Priority

JP 2018009533 A 20180124

Abstract (en)

In a hybrid vehicle, suppression of an amount of fuel consumed for reducing NOx stored in an NSR catalyst and suppression of deterioration in exhaust gas components due to unreacted fuel flowing out from the NSR catalyst are made compatible with each other. Predetermined power source control is carried out in accompany with the execution of NOx reduction processing to supply fuel to the NSR catalyst. In the predetermined power source control, an engine rotation speed of an internal combustion engine is made to decrease or an operation of the internal combustion engine is made to stop, and an electric motor is controlled so as to compensate for required torque. Further, during a period of execution of the predetermined power source control, a lower limit value of a predetermined target SOC range for an SOC of a battery is changed to a value smaller than at times other than the period of execution of the predetermined power source control.

IPC 8 full level

**F01N 3/08** (2006.01); **B60K 6/22** (2007.10); **B60W 20/16** (2016.01); **F02D 41/02** (2006.01)

CPC (source: CN EP US)

**B01D 53/9422** (2013.01 - US); **B01D 53/9495** (2013.01 - US); **B60K 6/22** (2013.01 - US); **B60K 6/445** (2013.01 - EP);  
**B60W 10/06** (2013.01 - CN EP US); **B60W 10/08** (2013.01 - CN EP US); **B60W 20/00** (2013.01 - US); **B60W 20/16** (2016.01 - CN EP US);  
**F01N 3/0814** (2013.01 - EP US); **F01N 3/0842** (2013.01 - EP US); **F01N 3/0871** (2013.01 - EP US); **F01N 3/206** (2013.01 - US);  
**F01N 3/36** (2013.01 - CN); **F01N 9/00** (2013.01 - US); **F02D 17/04** (2013.01 - CN); **F02D 29/06** (2013.01 - CN); **F02D 31/001** (2013.01 - CN);  
**F02D 41/0275** (2013.01 - EP US); **F02D 41/042** (2013.01 - EP US); **F02D 41/405** (2013.01 - CN); **B60W 2510/0638** (2013.01 - CN);  
**B60W 2510/244** (2013.01 - CN US); **B60W 2710/06** (2013.01 - US); **B60W 2710/08** (2013.01 - US); **B60Y 2200/92** (2013.01 - US);  
**F01N 2590/11** (2013.01 - EP US); **F01N 2610/03** (2013.01 - CN EP US); **F01N 2900/08** (2013.01 - EP US); **F01N 2900/104** (2013.01 - EP US);  
**F02D 2200/0806** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP); **Y02T 10/40** (2013.01 - EP); **Y02T 10/62** (2013.01 - EP)

Citation (applicant)

JP 2006112311 A 20060427 - TOYOTA MOTOR CORP

Citation (search report)

- [XP] EP 3381756 A1 20181003 - TOYOTA MOTOR CO LTD [JP]
- [A] US 2013325227 A1 20131205 - WHITNEY CHRISTOPHER E [US], et al
- [A] US 2017051707 A1 20170223 - WRIGHT JAMES [GB], et al
- [A] US 9650034 B2 20170516 - KIM MINSU [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3517748 A1 20190731; EP 3517748 B1 20210623; CN 110067622 A 20190730; CN 110067622 B 20210727; JP 2019127128 A 20190801;**  
JP 6863302 B2 20210421; US 11168597 B2 20211109; US 2019226373 A1 20190725

DOCDB simple family (application)

**EP 19153484 A 20190124; CN 201910038996 A 20190116; JP 2018009533 A 20180124; US 201916248865 A 20190116**